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De-gigging the labour market? An analysis of the 'algorithmic management' provisions in the proposed Platform Work Directive

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Abstract

Workers are increasingly being managed by technologies. Before spreading to larger segments of the labour market, algorithmic management systems were a signature feature of platform work. The exercise of power through digital labour platforms is one cause of the precarious working conditions in this area, an issue that could soon concern a wider group of workers in traditional economic sectors.

This article elucidates the provisions regulating algorithmic management in the proposed EU Directive on improving working conditions in platform work, which tackles automated surveillance and automated decision-making practices. The proposed Directive mandates the disclosure of their adoption and sets out information and explanation rights regarding the categories of actions monitored and the parameters considered. Unlike rules concerning the presumption of employment status, the provisions on algorithmic management apply to all platform workers, including genuinely self-employed persons.

Before offering a reasoned overview of the legal measures envisaged in the proposed text, this article grapples with the process leading to the proposed Directive in order to reveal the background and alternatives to the current formulation. It addresses the interplay between the text and other instruments regulating the deployment of technologies for managing workers. The steps intended to hold platforms to account are remarkable, but the regulatory technique could result in partially overlapping models, thereby increasing legal uncertainty and arbitrage.

Keywords: Algorithmic management; surveillance; right to explanation; gig economy; data protection, artificial intelligence, European Union.

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1. Introduction.

Technology is increasingly taking over functions customarily executed by employers. In 'datafied' workplaces, orders are issued via collaborative platforms, data are constantly and granularly collected, while sanctions are imposed after considering performance indicators and customer satisfaction rates. In addition, over the last two years, the mass-scale experiment concerning remote work necessitated by the COVID-19 pandemic has accelerated the adoption of automated monitoring and decision-making systems (ADMS), thereby facilitating the acceptance of these intrusive instruments. Indeed, recent estimates suggest that 'between 72.48 million and 101.05 million people in the EU-27 are exposed to algorithmic management in their main or secondary workplace, at least to some extent, in at least one area of work organisation'.[1] Moreover, evidence indicates that 42% of European companies use at least one artificial intelligence (AI)-based technology.[2]

Drawing on the growing body of interdisciplinary literature,[3] the 'algorithmic management' formula refers to workplace practices that rely on digital devices or software to either partially or totally automate functions traditionally exercised by managers and supervisors. From a legal perspective, this process upsets the delicate balance between employer powers and countervailing factors expected to temper hierarchical authority. In fact, a key function of labour regulation is the deployment of substantial and procedural rules designed to eradicate abuses that impinge on fundamental rights while bolstering the efficient organisation of the workforce throughout its entire life cycle, from hiring to firing. Modern technologies are altering this imperfect equilibrium, deepening information asymmetries and subjection to the command-and-control position of those who hold (data) power.[4]

Work in the gig economy is widely considered the 'cradle' of algorithmic management systems.[5] Indeed, algorithmic management is a universal, inherent feature of the platform-based business model, characterising not only the most-studied location-based platforms in the transportation and delivery sectors, but also microwork and freelance platforms.[6] It is, therefore, no coincidence that the first European Union (EU)-level legislative instrument intended to explicitly tackle algorithmic management in the realm of employment is the proposed Directive on improving working conditions for platform workers (Platform Work Directive [PWD]).[7] Ensuring fairness, transparency and accountability with regard to

[1] Commission Staff Working Document Impact Assessment Report accompanying the document Proposal for a Directive of the European Parliament and of the Council to improve the working conditions in platform work in the European Union, SWD/2021/396 final, 173.
[2] Ibid., 7. Although we are aware of the terminological and substantive differences, 'AI' and 'algorithms' are used interchangeably in this article. *See* also The European Commission's High-Level Expert Group on Artificial Intelligence, *A Definition of AI: Main Capabilities and Scientific Disciplines*, European Commission, 2019.
[3] Wood A., *Algorithmic management consequences for work organisation and working conditions*, in *JRC Working Papers Series*, WP No. 7, 2021; Baiocco S., Fernández-Macías E., Rani U., Pesole A., *The Algorithmic Management of work and its implications in different contexts*, European Commission, 2022.
[4] Manokha I., *The Implications of Digital Employee Monitoring and People Analytics for Power Relations in the Workplace*, in *Surveillance & Society*, 18, 4, 2020, 540-554.
[5] Adams-Prassl J., *Regulating algorithms at work: Lessons for a 'European approach to artificial intelligence'*, in *European Labour Law Journal*, 13, 1, 2022, 30-50.
[6] International Labour Office, *World Employment and Social Outlook 2021: The role of digital labour platforms in transforming the world of work*, ILO, 2021.
[7] Proposal for a Directive of the European Parliament and of the Council on improving working conditions in platform work, COM/2021/762 final.

algorithmic management in the platform work context is one of three specific objectives leading to the overarching goal of the proposed instrument,[8] namely the 'improvement of the working conditions and social rights of people working through digital labour platforms, including with the view to support the conditions for sustainable growth of digital labour platforms in the European Union'.[9]

This article aims to disentangle the merits and pitfalls of the PWD's section dedicated to algorithmic management. It is organised as follows. After this introductory section, the second section traces the rationale behind the regulation of algorithmic management under the PWD, relating various scenarios concerning the personal and material scope of these provisions that were considered during the consultation process. Next, the central focus of the third section is Chapter III (Art. 6–10) of the PWD, which concerns rights related to algorithmic transparency and human oversight of automated systems, in addition to information and consultation rights. We present and discuss these provisions, with a particular emphasis on their interplay with the provisions of the General Data Protection Regulation (GDPR).[10] The fourth section highlights the strengths and weaknesses of the EU's approach. We claim that the adoption of these provisions, despite being both promising and necessary (especially with regard to self-employed persons), will not be sufficient. The level of protection afforded in terms of algorithmic management is not far from the framework that would apply should those people performing platform work be considered labour market 'insiders' who are subject to ordinary rules on workplace monitoring, information and consultation, and ADMS. It must be admitted that the inefficiencies of existing frameworks, which leave those performing platform work under-protected, are only partially addressed in the current version of the PWD. Finally, the fifth section presents the conclusions of this article.

2. Behind the scenes of Brussels' experiment.

Addressing algorithmic management was not an objective of the EU initiative on platform work from its inception. In accordance with the Political Guidelines set out by President von der Leyen,[11] the Commission Work Programme 2021 announced a legislative proposal to improve the working conditions of people providing services through platforms 'with a view to ensuring fair working conditions and adequate social protection'.[12] It was only during the two-stage process of consultation with the European social partners that algorithmic

[8] The other two specific objectives are (i) 'to ensure that people working through platforms have – or can obtain – the correct employment status in light of their actual relationship with the digital labour platform and gain access to the applicable labour and social protection rights', and (ii) 'to enhance transparency, traceability and awareness of developments in platform work and improve enforcement of the applicable rules for all people working through platforms, including those operating across borders', Explanatory Memorandum, 3.
[9] Explanatory Memorandum, 2.
[10] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).
[11] von der Leyen U., *A Union that strives for more, My agenda for Europe*, European Commission, 2019.
[12] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Commission Work Programme 2021, COM/2020/690 final, 4.

management was identified as one of the key 'puzzles' of the gig economy ecosystem.[13] In the first-phase consultation document, the challenges related to algorithmic management[14] as it is broadly understood were identified by the Commission as one of seven policy areas that may need improvement.[15] During the second stage of the consultation, algorithmic management was crystallised as one of the three main areas of concern, along with misclassification and the cross-border nature of work.[16] That is, algorithmic management was identified as one of the key 'internal drivers' of the poor working conditions faced by platform workers.[17]

Why is it so crucial to ensure the fairness, transparency and accountability of the algorithmic management practices deployed by digital labour platforms? Which limitations of the current EU *acquis* does the PWD seek to overcome? What options were considered with regard to the personal scope of the envisaged provisions? Finally, what was the legal basis for introducing the provisions on algorithmic management in the PWD? Drawing on evidence from the consultation documents, the Impact Assessment Report[18] and the supporting study,[19] as well as on the Parliamentary Resolution of 16 September 2021 on fair working conditions, rights and social protection for platform workers,[20] this section provides a brief overview of these issues.

From the outset, it is important to understand the rationale behind addressing algorithmic practices in the PWD. The first key reason for doing so is related to the lack of sufficient information, consultation and redress mechanisms.[21] Crucially, the opacity inherent within algorithmic management practices may lead to discrimination on the grounds of age, gender, ethnicity or other prohibited factors. As recognised in the policy documents, this 'black box problem'[22] has proved fundamental far beyond the context of work in the platform economy,

[13] Jansen G., Daskalova V., Meijerink J., *Conclusion: Solutions to Platform Economy Puzzles and Avenues for Future Research*, in *Platform Economy Puzzles*, 2021, 229-241.
[14] The Consultation document defined algorithmic management as 'the greater or lesser extent of control exerted by digital labour platforms through automated means over the assignment, performance, evaluation, ranking, review of, and other actions concerning, the services provided by people working through platforms'. European Commission, *Protecting people working through platforms: Commission launches a first-stage consultation with the social partners*, 2021, https://bit.ly/3May6N3, accessed 13 Jun. 2022, 5.
[15] The other six regulatory targets were employment status, working conditions, access to social protection, access to collective representation and bargaining, cross-border dimension of platform work, and training and professional opportunities. *See* Consultation Document: First phase consultation of social partners under Article 154 TFEU on possible action addressing the challenges related to working conditions in platform work, C(2021) 1127 final, 3.
[16] Consultation Document: Second-phase consultation of social partners under Article 154 TFEU on possible action addressing the challenges related to working conditions in platform work, SWD(2021) 143 final, https://bit.ly/3wVTcZJ, accessed 13 Jun. 2022.
[17] Commission Staff Working Document Impact Assessment Report Accompanying the document Proposal for a Directive of the European Parliament and of the Council On improving working conditions in platform work SWD/2021/396 final (further: Impact Assessment), https://bit.ly/3t62DVw, accessed 13 Jun. 2022.
[18] *Ibid.*
[19] PPMI, *Study to support the impact assessment of an EU initiative on improving working conditions in platform work*, 2021, https://bit.ly/3wnr6aG, accessed 13 Jun. 2022.
[20] European Parliament resolution of 16 September 2021 on fair working conditions, rights and social protection for platform workers – new forms of employment linked to digital development, 2019/2186(INI), https://bit.ly/3N8S5N7, accessed 13 Jun. 2022.
[21] Impact Assessment, Annex A11.2.
[22] The term 'black box' is used here as a label to describe machine-learning-based systems that are characterised by a 'lack of clarity on how the system has been programmed to develop the rules, based upon which it fulfils its primary objective'. *See* Impact Assessment, 179. For an academic discussion about the black-box problem,

as it concerns all types of online platforms and AI systems. Still, its concrete implications for platform workers have been specifically emphasised.[23] More precisely, concerns have been raised regarding the information asymmetries and insufficient dialogue that exist between digital platforms and the (representatives of) people working through them. Further salient challenges relate to the apparent lack of accountability concerning the use of algorithmic tools, given the diffusion of managerial functions performed by the platforms and the inadequate channels of redress for countering seemingly arbitrary decisions.[24]

Moreover, algorithmic management is correlated with the employment status of those people who perform platform work. Algorithmic practices are one of the main drivers of misclassification in this regard, as they both obfuscate and augment managerial prerogatives. Simply put, the greater the level of automated monitoring and decision making, the higher the likelihood that a person performing platform work is 'subordinate' to a platform and so should be considered an employee. Elucidating algorithmic management practices can, therefore, empower people performing platform work to bring reclassification cases before the courts. By way of a vicious circle, the lack of employment status makes people performing platform work more vulnerable to algorithmic domination—they do not enjoy the standard set of rights concerning collective representation, for example, since these rights are mainly reserved for employees. Nor can they avail themselves of the relevant protection under the Transparent and Predictable Working Conditions Directive (DTPWC),[25] which provides for important transparency-related safeguards and information rights, albeit only for 'workers'.[26]

Aside from the correlation between algorithmic management practices and the notion of control (and, thus, employment status), another important impact on working conditions was identified during the consultation process. For example, trade unions predicted that enhancing algorithmic transparency would lead to an increase in earnings due to the greater possibility of negotiating pay levels and the removal of the automatic suspension or deactivation of accounts, which deprives workers of earning possibilities.[27] As a result of greater clarity in terms of how tasks are distributed, workers should be less overworked and stressed and, ultimately, more satisfied with their jobs.[28] Any health and safety risks could be mitigated by programming algorithms in a way that considers, for example, the time spent waiting for meals to be prepared and packed or waiting at red lights on the way to deliver products.

see Pasquale F., *The Black Box Society: The Secret Algorithms That Control Money and Information*, Harvard University Press, Harvard, 2015.

[23] *See* Impact Assessment stating that algorithmic management is 'a platform work quasi-specific challenge, which is not replicated to the same extent in the wider employment context', 11.

[24] Impact Assessment Annex A11.2, SWD(2021) 143 final.

[25] Directive (EU) 2019/1152 of the European Parliament and of the Council of 20 June 2019 on transparent and predictable working conditions in the European Union.

[26] Pursuant to Art. 1(2), this Directive applies to 'every worker in the Union who has an employment contract or employment relationship as defined by the law, collective agreements or practice in force in each Member State with consideration to the case-law of the Court of Justice'. For an analysis of the personal scope of the DTPWC, *see* Georgiou D., *The New EU Directive on Transparent and Predictable Working Conditions in the Context of New Forms of Employment*, in *European Journal of Industrial Relations*, 28, 2, 2022, 193-210. *See* also Menegatti E., *The Evolving Concept of "worker" in EU law*, in *Italian Labour Law e-Journal*, 12, 1, 2019, 71-83.

[27] PPMI annexes, nt. (19), 61.

[28] PPMI annexes, nt. (19), 58.

Another salient impact of algorithmic management on working conditions is related to the lack of portability of ratings. The inability to transfer or display records regarding their past labour, reputation or client relationships increases platform workers' already high dependency on one or a very limited number of platforms (the so-called 'lock-in effect'), which prevents them from investing in a career independent of the platform(s). The right to the portability of reputational data would represent a means of promoting inter-platform mobility.

The 'internal drivers' of poor working conditions related to algorithmic management are, therefore, both general and platform-specific. Many of the general challenges have already been addressed by the other EU legislation, albeit to varying extents: internal market instruments (e.g. Platform-to-Business [P2B] Regulation[29]), social policy instruments (e.g. the DTPWC) and general instruments (e.g. the GDPR, the anti-discrimination directives). Moreover, the proposed AI Act[30] will, when adopted, impose obligations regarding human oversight and the transparency of high-risk AI systems.[31] The relevance of this was forcefully emphasised by the platforms and employers' organisations, which maintained that the 'understandability' of algorithms, human oversight and the right to redress, despite being important, are already sufficiently guaranteed within the existing legal framework. By contrast, trade unions and representatives of platform workers claimed that the rights contained within the GDPR need to be made more specific in order to meet the demands of platform workers and, further, that the proposed AI Act does not fully respond to the specificities of employment relations.[32] Thus, they pleaded for the reinforcement of transparency, human oversight, channels of redress, information and consultation rights, as well as for the strengthening of the right to privacy. In addition, they demanded the right to the portability of reputational data and the prohibition of the automated termination and suspension of accounts.[33]

A careful examination of the existing EU *acquis* as part of the Impact Assessment led to the conclusion that the current framework leaves people performing platform work under-protected.[34] In a nutshell, limitations were said to result *inter alia* from the narrow personal scope of some of the existing instruments, which exclude either self-employed people (e.g. DTPWC) or workers (e.g. the P2B Regulation). Hence, the scope of algorithmic management rights depended on employment status. Moreover, important gaps in the material scope of these instruments have been identified. With regard to the GDPR, its provisions fail to provide workers with actionable collective rights, while difficulties associated with proving

[29] Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (Text with EEA relevance).
[30] Proposal For a Regulation of The European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act), COM/2021/206 final.
[31] 'AI systems used in employment, workers management and access to self-employment, notably for the recruitment and selection of persons, for making decisions on promotion and termination and for task allocation, monitoring or evaluation of persons in work-related contractual relationships' are considered high-risk according to the proposed AI Act.
[32] The proposal was to 'bring data rights within the remit of labour law, where actors such as trade unions and labour inspectorates play an important role', Impact Assessment, 25-26.
[33] For a synopsis of the social partners' responses during the consultation process, *see* Impact Assessment, Annex 2.
[34] For a detailed analysis of the relevance of the EU's social, labour and internal market *acquis*, see Impact Assessment, Annex 6 and 7.

whether algorithmic decisions affect workers in a sufficiently 'significant' way persist.[35] For its part, the proposed AI Act does not consider the particularities of employment relations.[36] All things considered, the preferred policy option according to the Impact Assessment, which is now reflected in the PWD, was to build on the existing instruments and introduce transparency, consultation, human oversight and redress rights for people working through platforms. The suggestion of including the right to data portability within the PWD was not followed by the EU legislator. One reason for this omission was the high cost of ensuring the interoperability of platforms' ratings, which was considered to be disproportionate, especially for small companies.[37]

An option for enhancing algorithmic management rights by means of unbinding guidance concerning possible actions on the part of Member States or digital labour platforms in this area was discarded.[38] As argued by trade unions, representatives of platforms workers, some national authorities and academics, only a binding regulation that introduces new material rights regarding transparency, consultation and human oversight would be an adequate response to the underlying challenges in this regard.[39] In addition, the Parliamentary Resolution expressed the need to ensure that all those engaged in platform work have the right to a prior reasoned statement as well as to effective and impartial dispute resolution.[40]

The personal scope of the EU legislative instrument could either be limited to those platform workers with an employment contract (including those misclassified as self-employed) or encompass all those performing platform work regardless of their classification.[41] Essentially, as expressed in the Impact Assessment, these options 'build on the evidence that algorithmic management is, to date, a platform work quasi-specific challenge which should be addressed as such'.[42] The 'business specificities' of the platform business model served as the explanation for the introduction of rights related to algorithmic management for only those people performing platform work, despite the widespread acknowledgement that algorithmic practices also exist outside the platform economy.[43]

This issue was, however, far from unproblematic. Various stakeholders, including trade unions and national authorities, stated during the consultation process that the regulation of such matters should not be limited to the platform economy. The Study to Support the Impact Assessment conducted by PPMI examined the possibility of covering all workers subject to algorithmic management practices, including those working beyond the platform economy. It was determined that the advantage of limiting the personal scope of the instrument would be a more efficient ('more focused') option in relation to the objectives of the PWD.[44] Crucially, opting for a regulation that targets the algorithmic management of all

[35] Impact Assessment, nt. (24), 142.
[36] Impact Assessment, nt. (24) 27.
[37] Impact Assessment, nt. (24) 46.
[38] It could have included, for example, best practice sharing, information campaigns or the establishment of domestic ombudsmen offices to handle complaints. This option was favoured by platforms and some national authorities. *See* Impact Assessment, nt. (24) 26.
[39] Impact Assessment, nt. (24) 27.
[40] Point 12.
[41] In the consultation documents, the personal scope of the Initiative was discussed jointly, without separating the personal scope of the algorithmic provisions and other provisions of the Directive.
[42] Impact Assessment, nt. (24) 25.
[43] *Ibid.*
[44] PPMI, nt. (19) 9.

workers (whether organised by platforms or not) would leave out self-employed platform workers (i.e. the vast majority).[45] The conclusion that the regulation should not depend on the contractual status of people performing platform work was relatively uncontroversial. The impact of algorithmic practices is essentially the same for platform workers with and without employment status, and it does not generate any extra costs. Moreover, this option was likely to create a level playing field in terms of platform work and avoid introducing a disincentive for platforms to offer people working through platforms the status of employee.[46]

A further key question concerned the legal basis for introducing algorithmic management rights for all people performing platform work, regardless of their employment status. While the PWD is based on Art. 153(1)(b) of the Treaty on the Functioning of the European Union (TFEU), which gives the EU a mandate to support and complement the activities of Member States with the aim of improving the working conditions of workers, the protection of the genuinely self-employed required a different legal basis. For this purpose, Art. 16(2) of the TFEU, which empowers the European Parliament and the Council to lay down rules relating to the protection of *individuals* with regard to the processing of personal data, was chosen. This provision is derived from Title II of the TFEU ('provisions having general application'). Interestingly, the second-phase consultation document made no reference to the possibility of such a legal basis, suggesting instead either Art. 53(1),[47] Art. 114[48] or, in the absence of a more specific legal basis, Art. 352 of the TFEU.[49] It must be stressed that Art. 16(2) is not a legal basis for the whole of Chapter III of the PWD, but only for those provisions that are related to the processing of personal data.[50] This has led to the fragmentation of the personal scope of algorithmic management rights under the PWD, as not all rights contained in Chapter III relate strictly to the protection of personal data.

3. The personal and material scope of 'algorithmic management' rights.

This section offers a reasoned overview of the legal measures envisaged in the proposed Directive. A significant difference between Chapter III of the PWD and the chapter devoted to the appropriate employment classification of platform workers lies in its scope.[51] More

[45] According to the Commission's estimates, nine out of ten platforms active in the EU today classify people working through them as self-employed.
[46] Impact Assessment, 46.
[47] This article gives the EU the mandate to issue directives coordinating national provisions concerning the uptake and pursuit of activities as self-employed persons.
[48] Art. 114(1) allows the EU to adopt measures for the 'approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market'.
[49] Art. 352 TFUE allows the EU to adopt an act necessary to attain the objectives laid down by the Treaties when the necessary powers of action are not provided for in the Treaties (the so-called 'flexibility clause'). The Impact Assessment mentions these three provisions (internal market legal basis) as an alternative to Art. 16(2) TFUE. *See* SWD(2021) 396 final, 17.
[50] Explanatory memorandum, 14.
[51] Looking at the mechanisms that can trigger the presumption of employment goes beyond the scope of this article. *See* Hießl C., The EU Commission's proposal for a Directive on Platform Work: an overview in the monothematic section of this *ILLeJ* issue (https://doi.org/10.6092/issn.1561-8048/15210). *See* also Rosin A., *Towards a European Employment Status: The EU Proposal for a Directive on Improving Working Conditions in Platform*

specifically, two categories of workers fall within the personal ambit of the application of algorithmic management provisions. First, 'platform workers', who are described in Art. 2(1)(4) as people performing platform work who have an employment contract or an employment relationship defined by the law, collective agreement or practice in force in the Member States, with consideration of the case law of the Court of Justice of the European Union.[52] Second, with the notable exclusion of rules concerning information and consultation (Art. 9), as well as health and safety provisions (Art. 7(1)),[53] all of the measures also cover genuinely self-employed workers and other people performing platform work who do not have a recognised employment relationship.

While clinging to a binary view of legal categories, this broad scope of application has been praised as an authentic novelty.[54] It is indeed undeniable that the choice is unprecedented and bold if read in accordance with existing legal and political constraints. Yet, it gives rise to some doubt with regard to the creation of new and unnecessary divisions between self-employed workers in the platform economy and independent contractors who operate in other areas of the labour market.

The phrase 'algorithmic management' is not legally defined in the proposed text of the PWD.[55] Rather, it appears to be an umbrella term encompassing both (i) 'automated monitoring systems which are used to monitor, supervise or evaluate the work performance of platform workers through electronic means' and (ii) 'automated decision-making systems' that are implemented to 'take or support decisions that significantly affect platform workers' working conditions', for example, their access to work tasks, their income, their occupational health and safety, their working time, their possibility for promotion, their contractual status, as well as the restriction, suspension or termination of their account (Art. 6(1)). While intrinsically and functionally interconnected, monitoring and decision-making are *neatly* distinguished within the proposal, as is the set of relevant information that platform workers are to be given.

However, the distinction between automated monitoring and automated decision-making is somewhat artificial. Employer powers both operate as a continuum and are functionally

Work, in *Industrial Law Journal*, 2022; Starcevic J., *The EU Proposal For a Directive On Improving Working Conditions in Platform Work*, in *Comparative Labour Law & Policy Journal, Dispatch*, 2022. For a comparative overview, *see* Davidov G., Alon-Shenker P., *The ABC Test: A New Model for Employment Status Determination?*, in *Industrial Law Journal*, 2022.

[52] *See* also Recital 16, 'persons performing platform work in the Union who have, or who based on an assessment of facts may be deemed to have, an employment contract or employment relationship as defined by the law, collective agreements or practice in force in the Member States, with consideration to the case-law of the Court of Justice of the European Union'. *See* Kullmann M., *'Platformisation' of Work: An EU Perspective on Introducing a Legal Presumption*, in *European Labour Law Journal*, 13, 1, 2021, 66-88.

[53] *See* Kullmann M., Cefaliello A., *The draft Artificial Intelligence Act (AI Act): Offering false security to undermine fundamental workers' rights*, 2021, https://ssrn.com/abstract=3993100, accessed 13 Jun. 2022.

[54] De Stefano V., Aloisi A., *The EU Commission takes the lead in regulating platform work*, Social Europe, 2021, https://bit.ly/3zf7pUt, accessed 13 Jun. 2022.

[55] The Commission Staff Working Document Impact Assessment defined it as 'automated monitoring and decision-making systems through which digital labour platforms control or supervise the assignment, performance, evaluation, ranking, review of, and other actions concerning, the work performed by people working through platforms'. *See* SWD(2021) 369 final, https://bit.ly/3NpYe7u, accessed 13 Jun. 2022, 3. For a definition, *see* Jarrahi M.H., Newlands G., Lee M.K., Wolf C.T., Kinder E., Sutherland W., *Algorithmic management in a work context*, in *Big Data & Society*, 8, 2, 2021. *See* also Borelli S., Brino V., Faleri C., Lazzeroni L., Tebano L., Zappalà L., *Lavoro e tecnologie. Dizionario del diritto del lavoro che cambia*, Giappichelli Editore, 2022.

interdependent.[56] The close monitoring of all aspects of performance execution is not performed merely for sake of it;[57] rather, it lays the groundwork for the issuing of orders and sanctions. That is, monitoring and decision-making are neither logically nor chronologically separated. The relentless collection of fine-grained data fuels algorithms capable of inferring additional characteristics (prediction) and shaping the constrained horizons of the options offered to the worker (pre-emption).[58] Iteratively, ADMS build on the outcomes of monitoring, while monitoring informs decision-making. Therefore, treating the two as separate betrays a too narrow and perhaps outdated understanding of how algorithms work in professional contexts. Doing so also risks corroborating a vision that removes the notion of power from the regulation of technology.[59]

The first set of rights introduced in Chapter III aims to increase algorithmic transparency by ensuring information rights for all people performing platform work. According to Art. 6, Member States must implement measures to make digital labour platforms inform people engaged in platform work of the adoption of automated monitoring systems and the types of actions 'monitored, supervised or evaluated by such systems', including when those functions are outsourced to clients. When it comes to ADMS, the catalogue of elements to be shared is very comprehensive. In addition to being informed of their adoption, all people engaged in platform work must be told 'the categories of decisions that are taken or supported by such systems', the main parameters that such systems analyse and their relative weights. Furthermore, they need to be informed about the grounds for the restriction, suspension or termination of their account, any refusal to provide remuneration for work they have performed, their contractual status or 'any decision with similar effects'.[60] At the latest on the first working day, as well as on any occasions of substantial changes and at any time upon workers', workers' representatives' and national labour authorities' express request, platforms are required to disclose this set of information 'in a transparent, intelligible and easily accessible form, using clear and plain language' (Art. 6(3) and 6(4)).

Rules concerning data minimisation are enshrined in the same article, to the extent that personal data related to the worker's emotional or psychological state cannot be processed, nor can personal health data (except for specific cases allowed by the GDPR under Art. 9(2)(b)–(j)). The same applies to personal data regarding private conversations, including communication with platform workers' representatives under Art. 6(5)(c) of the PWD. Moreover, the PWD prohibits the collection of personal data while the worker is not offering or performing platform work (Art. 6(5)(d)). In short, the PWD enshrines specific and

[56] Aloisi A., *Automation, autonomy, augmentation: labour regulation and the technological transformation of managerial prerogatives*, in Gyulavári T., Menegatti E. (eds.), *Decent work in the digital age: European and Comparative Perspectives*, Hart Publishing, forthcoming, 2022.
[57] Newlands G., *Algorithmic surveillance in the gig economy: The organization of work through Lefebvrian conceived space*, in *Organization Studies*, 42, 5, 2021, 719-737.
[58] Kellogg K.C., Valentine M.A., Christin A., *Algorithms at Work: The New Contested Terrain of Control*, in *Academy of Management Annals*, 14, 2020, 366. *See* also Bucher E.L., Schou P.K., Waldkirch M., *Pacifying the algorithm–Anticipatory compliance in the face of algorithmic management in the gig economy*, in *Organization*, 28, 1, 2021, 44-67.
[59] Hildebrandt M., *Smart Technologies and the End(s) of Law: Novel Entanglements of Law and Technology*, Edward Elgar, 2016; Véliz C., *Privacy is Power. Why and How You Should Take Back Control of Your Data*, Penguin Books, London, 2020.
[60] *See* Vallas S., Schor J.B., *What do platforms do? Understanding the gig economy*, in *Annual Review of Sociology*, 46, 2020, 273-294.

comprehensive information rights in line with the provisions of the GDPR, thereby increasing the legal certainty regarding their interpretation in the context of platform work.

The introduction of mere information rights would not be enough to effectively counter the information and bargaining power asymmetries that exist between people performing platform work and platforms. Thus, the PWD introduces an anticipatory duty to 'monitor and evaluate the impact of individual decisions taken or supported by automated monitoring and decision-making systems' on working conditions (Art. 7(1)), following a risk-based approach that is coming to the fore in EU law-making.[61] This internal due diligence-like process must be conducted in relation to risks in the domains of the health and safety of platform workers (only those with employment status, though) and involves the constant assessment of the suitability of the safeguards introduced to address such risks as well as the introduction of appropriate preventive and protective measures. In other words, national lawmakers could ask platforms to introduce a constant and evolvable plan of action that identifies and addresses risks arising from digital surveillance and ADMS. Unfortunately, little is said about the documentation of the outcomes of the risk assessment exercise or the notification of workers' representatives and national labour authorities.[62]

Art. 8 is arguably the most innovative aspect of the PWD. People performing platform work are entitled to an explanation from the platform 'for any decision *taken* or *supported* by an automated decision-making system that significantly affects the platform worker's working conditions' (emphasis added). This right is pivotal when it comes to exposing the logic behind determinations such as downgrading workers in the internal ranking, de-platforming them or denying well-paid slots as a penalty. Gig workers will be able to learn the elements of the algorithmic function 'if… then', which should allow them to understand the consequences of their conduct as well as the model used to calculate their compensation, among other matters.

For data protection *aficionados*, this wording should ring a bell,[63] as it draws from Art. 22 of the GDPR, albeit with two notable novelties. First, even decisions supported by ADMS (and not only *solely* based on automated processing) are covered by the right to an explanation. In this case, the express reference to the auxiliary role of ADMS does not come as a surprise, as it reiterates the interpretative guidance offered by the Art. 29 Working Party, which is now known as the European Data Protection Board (EDPB).[64] As a consequence, the residual human validation (known as rubber-stamping in the tech jargon) cannot be used to deny that these decisions fall within the remit of ADMS. Second, and more importantly,

[61] Georgiou D., *Digital labour platforms & the world of work: Towards a fairer re-distribution of risks*, manuscript. *See* also De Gregorio G., Dunn P., *The European risk-based approaches: Connecting constitutional dots in the digital age*, in *Common Market Law Review*, 59, 2, 2022, 473-500.

[62] Abraha H., Adams-Prassl J., Kelly-Lyth A., *Finetuning the EU's Platform Work Directive*, Oxford Business Law Blog, 2022, https://bit.ly/37V9A4a, accessed 13 Jun. 2022.

[63] The scholarly debate concerning whether a right to explanation exists within the GDPR has been intense and polarised. For an overview, *see* Casey B., Farhangi A., Vogl R., *Rethinking explainable machines: The GDPR's 'right to explanation' debate and the rise of algorithmic audits in enterprise*, in *Berkeley Technology Law Journal*, 34, 145, 2019. On the notion of 'significance', *see* Binns R., Veale M., *Is that your final decision? Multi-stage profiling, selective effects, and Article 22 of the GDPR*, in *International Data Privacy Law*, 11, 4, 2021, 319-332.

[64] Article 29 Data Protection Working Party (2017), *Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679* WP251rev.01, 21. *See* also Veale M., Edwards L., *Clarity, surprises, and further questions in the Article 29 Working Party draft guidance on automated decision-making and profiling*, in *Computer Law & Security Review*, 34, 2, 2018, 398-404.

the GDPR's list of 'suitable measures to safeguard the data subject's rights and freedoms and legitimate interests' is expanded in the PWD, which goes beyond 'the right to obtain human intervention on the part of the controller' to object to or contest a decision under Art. 22(3) of the GDPR.

Upon closer inspection, the right to obtain an individualised written explanation for significant decisions resurfaces from the Preamble to the GDPR (Recital 71) and gains new prominence. Without falling into the techno-legal dispute regarding how to make a string of code explainable,[65] this provision shifts the burden of *ex-post* legibility to platforms, which are required to devise *ex-ante* organisational arrangements that are accountable in terms of their effects and consequences.[66] Aside from contributing to the prevention of unfairness, inaccuracy and discrimination,[67] the safeguards meant to render decisions understandable can serve to establish the substance of successive remedial mechanisms triggered by allegedly wronged workers, for example, in the field of occupational health and safety or non-discrimination and equality law.

This wealth of information could also serve to enable workers' representatives and trade unions that are better placed than individuals when it comes to enforcing workers' rights by means of (strategic) litigation.[68] As recommended by the EDPB guidelines,[69] the data controller is expected to find simple and meaningful ways to inform the data subject of the rationale and criteria behind a decision. Despite the complexity of algorithms' inner workings, disclosing a list of 'causes' and 'effects' represents a viable means of complying with the above-mentioned rules. Data protection authorities (DPAs) at the domestic level will likely provide useful rulebooks, toolboxes and templates to ease the enforcement of such provisions.

A human review of significant decisions is initiated upon request by the affected person that has the right to contest platforms' practices. A contact point must be indicated, who will be responsible for discussing and clarifying the facts, circumstances and reasons behind the decision. In addition, platforms must provide a written statement concerning semi- or fully automated decisions with critical effects in areas such as the restriction, suspension or termination of accounts, denial of remuneration for work performed and contractual status. Moreover, workers can request a revision of the decision if the explanation does not prove persuasive or they feel hindered in relation to their rights. The platform is obliged to give a

[65] For an overview, *see* Goodman B., Flaxman S., *European Union regulations on algorithmic decision-making and 'a right to explanation'*, in *AI MAG*, 38, 2017, 55-56; Hamon R., Junklewitz H., Sanchez J., *Robustness and Explainability of Artificial Intelligence – From Technical to Policy Solutions*, Publications Office of the European Union, 2020. *See* also De Stefano V., Wouters M., *AI and digital tools in workplace management and evaluation. An assessment of the EU's legal framework*, Scientific Foresight Unit (STOA), 2022.
[66] Selbst A.D., Powles J., *Meaningful information and the right to explanation*, in *International Data Privacy Law*, 7, 2017, 233-242.
[67] Xenidis R., Senden L., *EU non-discrimination law in the era of artificial intelligence: Mapping the challenges of algorithmic discrimination*, in Bernitz U., Groussot X., Paju J., de Vries S.A. (eds.), *General Principles of EU Law and the EU Digital Order*, Kluwer Law International, 2020.
[68] *See* Chapter V of the Platform Work Directive on remedies and enforcement, particularly Art. 14. *See* Senatori I, Spinelli C. (eds.), *Litigation (collective) Strategies to Protect Gig Workers' Rights. A Comparative Perspective*, Giappichelli, Torino, 2022. *See* also European Trade Institute, *OSH strategic litigation at a crossroads*, 2022, https://www.etui.org/events/osh-strategic-litigation-legal-crossroads, accessed 13 Jun. 2022.
[69] Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation, 25.

detailed reply within a reasonable timeframe, 'without undue delay and in any event within one week of receipt of the request' (Art. 8(2)).

Finally, platform workers' representatives enter the regulatory scene.[70] The drafters of the PWD refrain from using the term 'trade unions', possibly to include other non-institutional or grassroots initiatives, which still play a significant role in this highly fragmented context.[71] Such representatives must be informed and consulted on 'decisions likely to lead to the introduction of or substantial changes in the use of automated monitoring and decision-making' affecting platform workers (Art. 9). Abandoning the exceptionalism so far reserved for platform operators, a principle concerning the disclosure of the adoption of workplace technologies, which is valid in all segments of the labour market, is also applied to the benefit of platform workers. Given the intricacies of data-driven tools, the PWD sets out the possibility for platform workers' representatives to be 'assisted by an expert of their choice', the costs of whose service must be covered by the platform when the number of platform workers exceeds 500 in a certain Member State (Art. 9(3)). Regrettably, such information and consultation provisions do not apply to genuinely self-employed gig workers.

4. Strengths and weaknesses of the EU approach.

A widely held view among commentators is that, overall, the PWD is set to offer meaningful safeguards for all persons performing platform work. While we share this general appreciation of the planned provisions regarding algorithmic management, in this section we offer some critical remarks.[72] One important caveat is needed before proceeding with the analysis: the current wording of the PWD is likely to change substantially, both in terms of the formulation and the personal scope of the provisions.

Tension can be observed between the urgency of writing down binding rules on algorithmic management and the novelty of these provisions when compared with the GDPR rules and data protection rights applicable to employment-related matters at the domestic level in almost all EU countries.[73] It is quite striking that the main purpose of Chapter III of the PWD is threefold: to provide clarity so as to bring people performing platform work within the scope of existing frameworks, to design a more comprehensive set of legal solutions and to add new material rights that draw on and complement current ones.

Preliminary achievements in terms of strategic litigation appear to confirm the (partial?) suitability of the GDPR provisions in curbing the inordinate expansion of algorithm-driven

[70] Defined under Art. 2(1) para 5. as 'workers' organisations or representatives provided for by national law or practices, or both'.

[71] Aloisi A., Gramano E., *Workers without workplaces and unions without unity: Non-standard forms of employment, platform work and collective bargaining*, in *Employment Relations for the 21st Century*, *Bulletin of Comparative Industrial Relations*, 107, 2019, 37-57.

[72] For constructive criticism, *see* Abraha H., Adams-Prassl J., Kelly-Lyth A., *Finetuning the EU's Platform Work Directive*; Fairwork, Response to the European Commission's Proposal for a Directive on Platform Work, 2021, https://bit.ly/3QaqSeY, accessed 13 Jun. 2022.

[73] Art. 88 of the GDPR. *See* also Otto M., *'Workforce Analytics' v Fundamental Rights Protection in the EU in the Age of Big Data*, in *Comparative Labour Law and Policy Journal*, 40, 3, 2019, 389-404; Sartor G., Lagioia F., *The impact of the General Data Protection Regulation (GDPR) on artificial intelligence*, European Union, 2020.

technologies.[74] For example, the GDPR has been successfully mobilised in court to enforce information rights, although it has proved a blunt weapon when flesh-and-bone decision-makers go the 'last mile' in decision-making supported by algorithms (failing to meet the 'solely automated decisions' criterion).[75] Something similar occurred with the narrow interpretation of the notion of '[a decision with] legal or similarly significant effect'.[76] Will the PWD be able to overcome these limitations simply by introducing (new) rules tailored to people working for platforms? In addition, if algorithmic management is not a platform work-specific phenomenon, would it not be more appropriate to adopt a legislative instrument with a broader personal scope? Scholars raised concerns in this regard in the early days of the gig economy, long before the adoption of the PWD was even conceivable.[77]

As discussed above, the drafters of the PWD were well aware of this conundrum during the consultation process. Ultimately, these questions stem from classical legal-tech regulatory dilemmas such as (i) the best way to deploy legal solutions capable of keeping up with emerging technologies, (ii) whether general principles can be interpreted and applied expansively, and (iii) the riskiness of an approach based on over-specification and laser-sharp definitions that are inevitably prone to both obsolescence and circumvention. These are not idle speculations. Upon closer inspection, Chapter III of the PWD is poised to become yet another piece of the patchy jigsaw that encompasses the GDPR, the P2B Regulation, the AI Act[78] and several other EU law instruments, including the DTPWC. If this wide-ranging set of rules is failing to offer meaningful protection to people performing platform work, it is questionable whether a narrowly construed chapter on algorithmic management within the PWD could succeed in this endeavour.

It cannot be denied, however, that by naming those practices and addressing them in a targeted and binding legal instrument, the EU legislator has sent a clear message to platform operators. Their alibis centring on insidious 'black box' rhetoric, according to which little can be done on their side to reveal internal code-based rules to platform workers, are no longer credible. Courts, DPAs and labour inspectorates can now count on a robust and interconnected framework. The procedural safeguards mandated in the PWD, such as the right to information, consultation and explanation, empower platform workers and their representatives to understand and possibly challenge algorithmically made decisions while forcing platforms to redesign their business practices.

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[74] Gellert R., van Bekkum M., Zuiderveen Borgesius F., *The Ola & Uber judgments: For the first time a court recognises a GDPR right to an explanation for algorithmic decision-making*, EU Law Analysis, 2021, https://bit.ly/3uTR1Xt, accessed 13 Jun. 2022. For a focus on the Spanish case, *see* Villarroel Luque C., *Workers vs Algorithms: What Can the New Spanish Provision on Artificial Intelligence and Employment Achieve?*, in *VerfBlog*, 2021, https://verfassungsblog.de/workers-vs-ai/, accessed 13 Jun. 2022.

[75] For an updated overview of ADM and the GDPR, *see* Barros Vale S., Zanfir-Fortuna G., *Automated Decision-Making Under the GDPR: Practical Cases from Courts and Data Protection Authorities*, Future of Privacy Forum, 2022, https://bit.ly/3FUGXRg, accessed 13 Jun. 2022.

[76] *Ibid.*, 23.

[77] De Stefano V., Aloisi A., *European Legal Framework for 'Digital Labour Platforms'*, European Commission, 2018. *See* also Prassl J., Risak M., *The legal protection of crowdworkers: Four avenues for workers' rights in the virtual realm*, in Meil P., Kirov V. (eds.), *Policy implications of virtual work*, Palgrave Macmillan, 2017, 273-295.

[78] Proposal For a Regulation of The European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act), COM/2021/206 final. Kelly-Lyth A., *European Union, the AI Act and algorithmic management*, in *Comparative Labour Law & Policy Journal, Dispatch*, 2021.

While mostly in line with the GDPR's impact assessment (Art. 35),[79] the 'due-process-like' model envisaged in the PWD is promising, although it leaves room for improvement. Coupled with information and access rights under Art. 13, 14, 15 and 88 of the GDPR, this model promises to re-engineer the current '*ex-post* damage-control approach',[80] adopting a precautionary and participative method that is particularly suited to read as 'innovation-friendly'. In addition, the model is consistent with the 'process-based law' system that imposes certain requirements with regard to the legitimate exercise of managerial prerogative, thereby ensuring both transparency and accountability.[81] Indeed, the powers of employers are not unfettered. They must be exercised according to a system of procedural and substantial safeguards aimed at preventing abuses, for instance, by mobilising the countervailing power of workers' representatives through information and consultation.

And there is more. This compartmentalisation of protective schemes for categories of workers risks heightening legal uncertainties. To give just one example, 'business users' (i.e. genuinely self-employed workers) are entitled to learn from terms and conditions 'the main parameters determining the rankings and the reasons for the relative importance of those main parameters as opposed to other parameters' under Art. 5 of the P2B Regulation. Thanks to the PWD, they now have the opportunity to gain information and explanation concerning the outputs of automated decision-making, including the inner metrics and their respective weights. Concomitantly, and somehow paradoxically, genuinely self-employed workers 'accept' (or better, the PWD tolerates this drift) being subject to a degree of surveillance and automated decision-making that would likely allow domestic courts to reclassify their relationship as a subordinate one, with the attendant set of stronger protections.[82]

Such a scarce degree of autonomy would stand in contrast to the very nature of self-employment. Nevertheless, it must be acknowledged that information and explanation rights, coupled with more transparent terms and conditions, could empower self-employed workers to obtain evidence that could then be used in the context of litigation to expose the existence and extent of a command-and-control power that squarely fits with that exercised in the context of an employment relationship.[83] However, self-employed platform workers can only rely on *individual* transparency rights, as they are not covered by Art. 9 on information and consultation duties towards platform workers' representatives. This is one of the most troubling limitations of the proposed Directive, which ought to be addressed in the final text.

Looking at the ongoing initiatives concerning AI, particularly the AI Act, other pitfalls emerge. AI systems 'used for making decisions on promotion and termination of work-related contractual relationships, for task allocation and for monitoring and evaluating

[79] Kaminski M.E., Malgieri G., *Algorithmic impact assessments under the GDPR: Producing multi-layered explanations*, in *International Data Privacy Law*, 134, 2020.
[80] De Stefano V., Taes S., *Algorithmic management and collective bargaining*, in *ETUI Foresight Brief*, 2021.
[81] Molè M., *The Quest For Effective Fundamental Labour Rights in The European Post-Pandemic Scenario: Introducing Principles of Explainability and Understanding For Surveillance Through AI Algorithms and IoT Devices*, paper presented at the 19th International Conference in Commemoration of Marco Biagi 'Work Beyond the Pandemic. Towards a Human-Centred Recovery', 2022, https://ssrn.com/abstract=4099663, accessed 13 Jun. 2022.
[82] De Stefano V., Durri I., Stylogiannis C., Wouters M., *Platform Work and the Employment Relationship*, International Labour Organization, 2021.
[83] Hießl C., *Case Law on the Classification of Platform Workers: Cross-European Comparative Analysis and Tentative Conclusions*, in *Comparative Labour Law & Policy Journal*, forthcoming, https://ssrn.com/abstract=3839603, accessed 13 Jun. 2022.

performance and behaviour of persons' are identified as a high-risk area (Recital 36 of the AI Act). Even leaving aside the fact that yet another separation of workforce management practices emerges here,[84] the text of the Draft Regulation states that the 'conformity assessment procedure' of these systems in relation to existing rules will only be subject to an *ex-ante* internal self-evaluation by the provider, without the involvement of external regulators (such as 'market surveillance authorities', 'national supervisory authorities' and 'conformity assessment bodies').[85]

In the case of platform workers, this kind of conformity assessment of adequacy and compliance would not be sufficient, given the information and consultation duties falling on platforms.[86] Then, paradoxically, gig workers will enjoy stronger protections than those reserved for 'ordinary' workers. Should the AI Act be approved in its current formulation, EU law would effectively afford meaningful safeguards to platform workers while weakening the protective standards against the same forms of abusive monitoring for all other workers.[87]

5. Conclusions.

Algorithmic management is both novel and long-lasting.[88] Labour law scholars have paid particular attention to the change that it brings to the power balance between parties[89] in a work relationship and to its implications for employment classification. Therefore, an instrument targeting the situation of platform workers would be incomplete without addressing the challenges related to algorithmic management. Chapter III of the PWD needs to be read in accordance with the overarching purpose of this regulation, that is, the improvement of the working conditions of people engaged in platform work. On the whole, technology assuming a quasi-hierarchical approach is acknowledged to be a source of degradation in terms of the working conditions of all workers mediated or organised by platforms, regardless of their (genuine or twisted) contractual designation, leading to erratic schedules, psychosocial stress, risk of accidents and income unpredictability.

Algorithmic transparency, human oversight of ADMS and information and consultation rights certainly contribute to combating misclassification, which represents a significant added value of the PWD. In addition, ensuring the transparency, fairness and accountability of algorithms can be considered a self-standing (even if secondary) objective of the PWD, which is shared by other regulations tackling digital transformation in the realm of

[84] Kelly-Lyth A., *European Union, the AI Act and algorithmic management*, in *Comparative Labor Law & Policy Journal*, Dispatch no. 39, 2021.
[85] Biber S.E., *Machines Learning the Rule of Law: EU Proposes the World's first Artificial Intelligence Act*, in *VerfBlog*, 2021, https://verfassungsblog.de/ai-rol/, accessed 13 Jun. 2022.
[86] The current formulation of the AI Act would pose even more complex 'constitutional' questions, as it would cut off the tail of the EU27 employment protection legislation on workplace technology.
[87] Aloisi A., De Stefano V., *Your Boss Is an Algorithm. Artificial Intelligence, Platform Work and Labour*, Hart Publishing, Cheltenham, 2022.
[88] Strohmeier S., *Research in e-HRM: Review and implications*, in *Human Resource Management Review*, 17, 1, 2007, 19-37. *See* also Lee M.K., Kusbit D., Metsky E., Dabbish, L., *Working with machines: The impact of algorithmic and data-driven management on human workers*, in *Proceedings of the 33rd annual ACM conference on human factors in computing systems*, 2015, 1603-1612.
[89] Hießl C., *Case law on algorithmic management at the workplace*, forthcoming, https://ssrn.com/abstract=3982735, accessed 13 Jun. 2022.

employment relations and beyond (e.g. Digital Service Act, P2B Regulation, AI Act).[90] The Commission has gone to great lengths to ensure the applicability of the existing EU *acquis* to people performing platform work irrespective of their contractual status. Inevitably, this has come at the expense of adding yet another piece to the already complex (and still growing) mosaic of related instruments. Whether the desired legal certainty will be achieved, or whether the PWD will only serve to further complicate the existing legal framework, remains to be seen. At the time of writing, as the PWD is subject to a heated discussion and other instruments addressing various facets of algorithmic management are still in the pipeline, it is too early to make a final judgment in this regard.[91]

There are undeniably good explanations justifying the limited personal scope of application of the algorithmic management provisions, which do not extend beyond the boundaries of platform work. While scholars are calling for a more 'universalistic' approach,[92] the PWD could serve as an imperfect 'experiment' with a limited subject application,[93] whose positive results could lead to the adoption of parallel measures intended to regulate the totality of workers supervised, managed or recruited by ADMS. As indicated in the second-stage consultation document, 'if tailored to algorithmic management challenges in platform work, the initiative could pave the way for a broader approach to the use of artificial intelligence in the labour market in the near future'.[94] This shows the broader and more far-reaching ambition of the Commission.

A lot will also depend on the finetuning of the proposed provisions in the coming months, as the devil lies in the details. For this finetuning to occur, a wide degree of cleverness is required among the social partners who are called on to make existing rights actionable by means of strategic litigation, training to strengthen digital shills, co-determination and adaptive collective agreements.[95] On the regulatory front, the transposition and implementation of the PWD's measures could offer a case wherein the effectiveness of specific national legislation could be tested and strengthened, including the rules mandated by DPAs, in line with the EU's ambitious agenda concerning digital transformation.

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[90] Potocka-Sionek N., Aloisi A., *'Festina Lente': The ILO and EU Agendas on the Digital Transformation of Work*, in *International Journal of Comparative Labour Law and Industrial Relations*, 37, 1, 2021, 35-64.

[91] At the time of submitting this article, the discussions within the Council of the European Union are ongoing. The next step in the procedure will be a reading at the European Parliament. See *Follow the steps of procedure 2021/0414/COD*, https://eur-lex.europa.eu/procedure/EN/2021_414, accessed 13 Jun. 2022.

[92] Kelly-Lyth A., Adams-Prassl J., *The EU's Proposed Platform Work Directive: A Promising Step*, in *VerfBlog*, 2021, https://verfassungsblog.de/work-directive/, accessed 13 Jun. 2022.

[93] We do not use this definition in a technical way, as Chapter III does not fulfil the key requirements of a regulatory experiment in terms of the temporal scope, indication of the goals and transparency and adherence to legality principles. *See* generally Ranchordás S., *Experimental Regulations and Regulatory Sandboxes: Law without Order?*, in *Law & Method*, 2021. *See* also Truby J., Brown R.D., Ibrahim I.A., Parellada O.C., *A Sandbox Approach to Regulating High-Risk Artificial Intelligence Applications*, in *European Journal of Risk Regulation*, 13, 2022, 270.

[94] Consultation Document: Second-phase consultation of social partners under Article 154 TFEU on possible action addressing the challenges related to working conditions in platform work, SWD(2021) 143 final, 24.

[95] Reventlow N.J., *Making accountability real: Strategic litigation*, in *Digital Freedom Fund*, 2020, https://digitalfreedomfund.org/making-accountability-real-strategic-litigation/, accessed 13 Jun. 2022. For a comprehensive overview, *see* AI Now Institute, *Litigating Algorithms: Challenging Government Use of Algorithmic Decision Systems*, AI Now Institute, 2018. *See* also TUC, *When AI is the boss: An introduction for union reps*, TUC, 2021; Prospect, *Data Protection Impact Assessments: A Union Guide*, Prospect, 2020; Lighthouse, *A Guide to Good Data Stewardship for Trade Unions*, Lighthouse, 2021; UNI Europa, *Algorithmic Management – A Trade Union Guide*, UNI Europa, 2020.

In short, the set of provisions included in the proposed PWD could contribute to 'de-gigging' the labour market by cleansing it of one of the most ubiquitous and threatening legacies of platform-based organisational models.[96] Notwithstanding the uphill tasks that lie ahead, we believe that the algorithmic management provisions of the PWD represent an important step in the long journey toward achieving better regulation of the technologies governing the workforce. Being managed by an algorithm does not often live up to the emancipatory promise of modern technologies.[97] Informed by a 'human-in-command' approach, labour law is rife with rules-bound strategies to curb the excesses of managerial domination. It will not disappoint expectations, nor will it betray the long-lasting tradition of the rationalisation of managerial prerogative, as long as a collective process of regulation of technology is implemented.

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[96] We draw on the term 'gigification', which has been widely used in the academic and public debate to describe the hyper-flexible forms of work enabled by platforms. Algorithmic management practices have been identified as key facilitators of this process. *See* Gilbert T., *The Amazonian era. Gigification of work*, 2021, https://bit.ly/3x8mUfj, accessed 13 Jun. 2022; Behl A., Jayawardena N., Ishizaka A., Gupta M., *Gamification and Gigification: A Multidimensional Theoretical Approach*, in *Journal of Business Research*, 2021; Braganza A., Chen W., Canhoto A., Sap S., *Gigification, Job Engagement and Satisfaction: The Moderating Role of AI Enabled System Automation in Operations Management*, in *Production Planning & Control*, 2021, 1-14.
[97] O'Connor S., *Why are we all working so hard?*, Financial Times, 2022, on.ft.com/3tmATvT, accessed 13 Jun. 2022. *See* also Salvi del Pero A., Wyckoff P., Vourc'h A., *Using Artificial Intelligence in the workplace: What are the main ethical risks?*, OECD Social, Employment and Migration Working Papers, No. 273, OECD Publishing, 2022.

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